

REMARKS

This is a full and timely response to the outstanding final Office Action mailed April 29, 2005. Reconsideration and allowance of the application and pending claims are respectfully requested.

I. Claim Objections

Claim 16 has been objected under 37 CFR §1.75(a) for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as his invention or discovery.

Applicant has amended claim 16 in the manner suggested by the Examiner. In addition to this amendment, Applicant further amended claims 12 and 18 to correct typographical errors. Applicant respectfully submits that the claims are not objectionable and respectfully requests that the objection be withdrawn.

II. Claim Rejections - 35 U.S.C. § 102(e)

Claims 4-20 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Liu, et al. ("Liu," U.S. Pat. No. 6,523,046). Applicant respectfully traverses this rejection.

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(e).

In the present case, not every feature of the claimed invention is represented in the Lui reference. Applicant discusses the Lui reference and Applicant's claims in the following.

A. The Lui Disclosure

Lui discloses an infrastructure and method for supporting generic multimedia metadata. In particular, as is stated by Lui:

The present invention comprises an infrastructure and method for providing format-independent access by applications to multimedia file metadata originally provided in any of a set of supported formats. More particularly, in accordance with the present invention, a metadata abstraction interface is interposed between multimedia files and applications that seek to read metadata associated with the multimedia files.

[Lui, column 2, lines 50-57]

Later in the disclosure, Lui describes his invention in greater detail:

Having described exemplary computing environments in which the present invention is carried out, attention is directed to FIG. 2 that schematically depicts an illustrative embodiment of a multimedia abstraction interface architecture. In general, a digital image metadata abstraction interface 210 depicted in FIG. 2 provides an extensible framework. The framework includes an extensible set of coder/decoder pairs 212 for processing image file metadata from image files 214 of any supported metadata format. Application programs 216 indirectly access coder/decoder pairs 212 via application programming interfaces (API's) 218. The primary components of the abstraction interface

architecture and the component interactions are described herein below.

The digital image metadata abstraction interface 210 provides indirect access by applications (including content management utilities and tools), via a set of interface functions, to image metadata stored in any supported file format. More particularly, the abstraction interface 210 provides an abstracted metadata access interface that insulates applications (and their users) from particular image file metadata formats. The abstract interface enables programs to submit requests to a simple and consistent interface, provided in the form of API's 218, to access metadata without knowledge of a particular metadata file format.

[Lui, column 6, line 64 to column 7, line 7]

Although Lui describes an interface that is configured to manage files, including metadata, in detail, Lui does not describe a process in which such meta-data is initially created, or an image capture device that is capable of generating meta-data through image analysis.

B. Applicant's Claims

Lui fails to teach several of Applicant's claim limitations. Applicant discusses some of those claim limitations in the following.

1. Claims 4-5

Applicant's independent claim 4 provides as follows (emphasis added):

4. An image file embodied in a computer-readable medium, comprising:

digital image data that represents an image; and

image meta-data associated with the digital image data *created by applying a predefined image analysis algorithm to the digital image data to identify content within the image.*

Simply stated, Lui says nothing about image meta-data that was created by applying a predefined image analysis program to digital image data to identify content within the image. First, although Lui discusses management of existing meta-data at length, Lui does not describe a process in which meta-data is generated through application of an image analysis program. The Lui disclosure is devoid of such a teaching.

Second, although Lui often refers to image “metadata,” Lui does not state that the “metadata” identifies “content within the image.” To the contrary, it appears that the “metadata” to which Lui is referring pertains to data entered by the user. For example, in column 1, lines 35-38, Lui states that “The user may designate the metadata at the time of initial recording via a user input interface on a recording device. Alternatively, a user provides metadata at a later time by means of a multimedia file editor application program.” Moreover, although Lui identifies specific examples of metadata, this data is not related to image content. For instance, Lui states in column 7, lines 47-48, that “metadata” may include “camera model, focal length used, light level, etc.”

For at least the above reasons, Lui does not anticipate claim 4, or claims 5 and 6 which depend therefrom.

2. Claims 7-12

Applicant’s independent claim 7 provides as follows (emphasis added):

7. An image capture device, comprising:
- image capture hardware configured to capture an image; and
- logic configured for:
- generating a digital representation of the image, the digital representation comprising image data;
 - applying at least one predefined image analysis algorithm to the digital representation of the image to identify content within the image*, the at least one predefined image analysis algorithm *generating image meta-data corresponding to the image content*; and
 - combining the image meta-data corresponding to the image content with the image data to define new image data.

Regarding claim 7, Lui fails to teach “applying at least one predefined image analysis algorithm . . . to identify content within the image” so as to result in “generating image meta-data corresponding to the image content” for reasons described in the foregoing. Claim 7 and its dependents are allowable over Lui for at least this reason.

As a further point, Lui clearly does not teach an “image capture device” that is capable of the above-described actions. Instead, Lui only discusses an interface 210 that is executed on a computer 110. The computer 110 is described in detail in columns 4-6 and clearly is not an “image capture device”.

3. Claims 13-15

Applicant's independent claim 13 provides as follows (emphasis added):

13. A method for generating an image file containing meta-data, the method comprising:

identifying a digital representation of an image, the digital representation comprising image data;

applying at least one predefined image analysis algorithm to the digital representation of the image to identify content within the image, the at least one predefined image analysis algorithm generating meta-data corresponding to the image content; and

combining the meta-data corresponding to the image with the image content data to define new image data.

Regarding claim 13, Lui does not teach “applying at least one predefined image analysis algorithm to the digital representation of the image to identify content within the image, the at least one predefined image analysis algorithm generating meta-data corresponding to the image content” for reasons described above. Claim 13, as well as claims 14 and 15, are allowable over Lui for at least this reason.

4. Claims 16-18

Applicant's independent claim 16 provides as follows (emphasis added):

16. A method for searching image files having specific image meta-data, the method comprising:

receiving a search query comprising information related to specific image meta-data;

based on the search query, searching one or more image files for the image meta-data specified in the search query, the image meta-

data having been generated by applying a predefined image analysis algorithm to a digital representation of an image to identify content within the image; and

identifying one or more of the image files that comprise image meta-data that matches the image meta-data specified in the search query.

Regarding claim 16, Lui does not teach a method for searching image files comprising searching one or more image files for image meta-data that was “generated by applying a predefined image analysis algorithm to a digital representation of an image to identify content within the image” for reasons described in the foregoing. Claim 16, and claims 17 and 18, are allowable over Lui for at least this reason.

5. Claims 19 and 20

Applicant’s independent claim 19 provides as follows (emphasis added):

19. A method for locating an image file, the method comprising:

providing a search query comprising information related to specific image meta-data; and

receiving one or more image files comprising image meta-data that matches the image meta-data specified in the search query, the image meta-data having been generated by applying a predefined image analysis algorithm to the digital representation of the image to identify content within the image.

Finally, regarding claim 19, Lui does not teach a method for locating an image file that comprises receiving an image file comprising meta-data that matched meta-data specified in a search query, the image meta-data “having been generated by applying a

predefined image analysis algorithm to the digital representation of the image to identify content within the image” for reasons described above. Claims 19 and 20 are allowable over Lui for at least this reason.

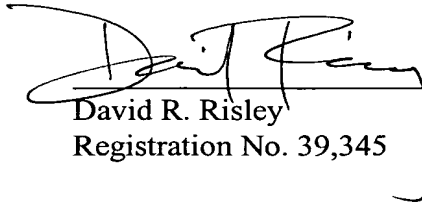
C. Conclusion

Due to the shortcomings of the Lui reference described in the foregoing, Applicant respectfully asserts that Lui does not anticipate Applicant’s claims. Therefore, Applicant respectfully requests that the rejection of these claims be withdrawn.

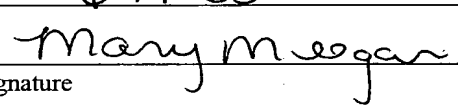
CONCLUSION

Applicant respectfully submits that Applicant's pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,


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6-14-05

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